

REMARKS

It is believed that this Amendment, in conjunction with the following remarks, place the application in immediate condition for allowance or at least presents the claims in better form for consideration on Appeal. Accordingly, entry of this Amendment and favorable consideration of the application are respectfully requested in view of the foregoing amendments and the following remarks. Claims 1-21 are pending in the present application. Claims 1, 10 and 19 are independent claims. Claims 20 and 21 are added by this Amendment.

35 U.S.C. 102(b)

Claims 1-5, 9-14, 18 and 19 are rejected under 35 U.S.C. § 102(b) as being anticipated by US Patent No. 5,815,795 ("Iwai"). Applicant respectfully traverses this art grounds of rejection.

Iwai is directed to an oscillation detecting system for a wireless repeater. Iwai is directed to a standard repeater that includes circuitry to amplify a wireless signal. The Examiner's "Response to Arguments" section points out that Iwai is directed to "an oscillation detecting apparatus for detecting that a wireless repeater is oscillating, and a wireless repeater having an ability to detect its own oscillation" (See Column 1, lines 7-15 of Iwai). However, as will be discussed below, Iwai's repeater does not detect oscillation based on wireless communication signals processed at a wireless communication device circuit.

Iwai does detects repeater oscillation based on signal amplitude, not processed wireless communication signals

Iwai's repeater detects and processes the envelope of the output signal of the repeater to determine if the repeater is in oscillation, as described in Iwai with respect to FIG. 4. With regard to FIG. 4 of Iwai, Iwai states the following:

The oscillation detecting apparatus 1 is shown in FIG. 4 as comprising a band-pass filter 14 besides the envelope detector 11 and the low pass filter 12. The envelope detector 11 is designed to receive a signal and produce an envelope of the received signal. The envelope detector 11 may be considered to be a device producing a power level signal varied in proportion with an amplitude of the output signal. Specifically, the power level signal is increased when the amplitude of the output signal is increased. Conversely, the power level signal is decreased when the amplitude of the output signal is decreased. The power level signal may be not necessarily direct proportional to the amplitude of the output signal. For example, the power level signal may be formed on the basis of the output signal through square detection techniques. The power level signal corresponds to the envelope of the output signal but, if desired, the power level signal may be a signal showing fluctuation of a physical value that is representative of intensity of the output signal.

(Emphasis added) (See Column 7, lines 4-22 of Iwai)

In view of the excerpted portion of Iwai produced above, the repeater of Iwai merely receives, amplifies, and re-transmits received signals, and uses the envelope of the output signal to determine an oscillation condition. In other words, the oscillating detecting apparatus 11 determines when the output power level of the repeater is above a threshold, and if so, determines that the repeater is in oscillation. Thus, the content of the wireless communication signals is irrelevant, and no “processing” is performed on these signals at the repeater, because the oscillation detecting apparatus 11 only considers the power level output at the repeater.

Because Iwai determines oscillation based only on the amplitude of the repeater's output signal, Applicant respectfully submits that Iwai cannot disclose or suggest “using the communication signals processed at the wireless communication device circuit to determine if the repeater system is in oscillation” as presently recited in independent claim 1 and similarly recited in independent claims 10 and 19. Again, the wireless communication signals routed through Iwai's repeater are not used by the oscillation detecting apparatus 11 to determine anything (they are simply amplified and re-transmitted), and the oscillation detecting apparatus 11 considers only envelope amplitude. As will be appreciated, using the amplitude of the entire envelope cannot be considered to be the same thing as using actual communication signals that are processed at a communication device.

In view of the above remarks, Applicant respectfully submits that Iwai cannot disclose or suggest “using the communication signals processed at the wireless communication device circuit to determine if the repeater system is in oscillation” as recited in independent claim 1 and similarly recited in independent claims 10 and 19.

As such, claims 2-9 and 11-18, dependent upon independent claims 1 and 10, respectively, are likewise allowable over Iwai at least for the reasons given above with respect to independent claims 1 and 10, respectively.

Newly added claim 20

Further, new claim 20 has been added which recites the limitation “wherein the using step uses the ratio of energy of a chip of a pilot signal to total interference (E_c/I_o) obtained from the processed communication signals to determine if the repeater system is in oscillation.”

As discussed above, Iwai does not disclose or suggest using signal data to determine oscillation, but rather detects oscillation based on envelope amplitude as output from the repeater.

Accordingly, Applicant respectfully requests that the Examiner allow claim 20, dependent upon independent claim 1, for at least this additional reason.

Claim 2 and Newly added claim 21

In the prior response, Applicant argued that the features of claim 2 were not taught or suggested by Iwai. The Examiner responded that “Iwai teaches an oscillation detecting apparatus for detecting an oscillation of a wireless repeater intervening between a base station and a mobile station brought in communication with each other through a time division multiple access system, said wireless repeater being operated to produce an input signal (establishing a

call) based on a radio wave transmitted from one of said base station and said mobile station, and amplify said input signal to produce an output signal to either base station or mobile station.”¹ Applicant respectfully submit that any reasonable interpretation of Iwai does not teach establishing a call from the wireless communication device circuit to a base station, as recited in claim 2. Instead, as noted by the Examiner above, Iwai merely amplifies an “input signal to produce an output signal to either base station or mobile station” thereby merely amplifying and relaying call information between a mobile station and a base station.

Further, new claim 21 has been added which recites the limitation “wherein the call is initiated from the wireless communication device circuit.” As discussed above, Iwai does not disclose or suggest a wireless communication device circuit embedded in the repeater and clearly, no call is initiated from the wireless communication device circuit in the repeater.

Accordingly, Applicant respectfully requests that the Examiner allow claims 2 and 21, dependent upon independent claim 1, for at least this additional reason.

In view of the above remarks, Applicant respectfully submits that each of claims 1-20 are allowable over Iwai. Applicant respectfully requests that the Examiner withdraw this art grounds of rejection.

35 U.S.C. 103(a)

Claims 6-9 and 15-18 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Iwai in view of US Publication No. 20040248581(“Seki”). Applicant respectfully traverses this art grounds of rejection.

Initially, Applicant agrees with the Examiner in that Iwai fails to disclose or suggest “wherein using the wireless communication device circuit comprises: obtaining signal to noise

¹ Final Office Action dated 11/2/2007, page 6.

ratio value to measure the signal quality” (Page 3 of the Office Action) and “wherein using the wireless communication device circuit comprises: receiving at least one closed loop power control command from the base station” (Page 4 of the Office Action). The Examiner alleges, however, that Seki discloses these particular deficiencies of Iwai. However, even assuming for the moment that the Examiner is correct with regard to the teachings of Seki, and further that an adequate rationale for combining Seki and Iwai is present (which Applicant does not admit), Applicant respectfully submits that a review of Seki indicates that Seki fails to cure the suggestion and disclosure deficiencies of Iwai with respect to independent claims 1 and 10 as discussed above.

As such, claims 6-9 and 15-18, dependent upon independent claims 1 and 10, respectively, are likewise allowable over Iwai in view of Seki at least for the reasons given above with respect to independent claims 1 and 10.

Applicant respectfully requests that the Examiner withdraw this art grounds of rejection.

Reconsideration and issuance of the present application is respectfully requested.

Conclusion

In view of the foregoing amendments and remarks, it is respectfully submitted that the application is in condition for allowance. If the Examiner believes that any additional changes would place the application in better condition for allowance, the Examiner is invited to contact the undersigned attorney, at the telephone number listed below.

Deposit Account Authorization

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any fees or overpayments that may be due with this response to Deposit Account No. 17-0026.

Respectfully submitted,
QUALCOMM, Incorporated

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